

WHAT IS CLAIMED IS:

1 1. A motor comprising:  
2 a boss having a center hole; and  
3 a shaft press-fitted into the center hole, a diameter of which is A,  
4 wherein a tapered portion is formed around one end of the shaft,  
5 which is inserted to the center hole, such that a dimension in the extending  
6 direction of the shaft is R; and  
7 wherein the boss includes a cylindrical recess formed concentrically  
8 with the center hole on one end face thereof facing a side from which the shaft  
9 is inserted such that a dimension in the extending direction of the center hole  
10 thereof is larger than R, and such that a diameter thereof is  $A < B \leq 1.05A$ .

1 2. The motor as set forth in claim 1, wherein the cylindrical recess  
2 includes a first side wall linearly extending from the end face of the boss and a  
3 second side wall subsequent to the first side wall, which is tapered inwardly in  
4 order to serve as an insertion guide member against which the tapered portion  
5 of the shaft is to be abutted when the shaft is inserted into the center hole.

1 3. The motor as set forth in claim 2, further comprising a rotor case  
2 integrally provided with the boss,  
3 wherein the shaft serves as a rotary shaft of the motor.

1 4. The motor as set forth in claim 3, wherein the rotor case includes a  
2 supporting face on which a disk rotated is to be disposed.

1 5. The motor as set forth in claim 3, wherein a caulking member is  
2 provided on at least one end face of the boss so as to surround the center hole,  
3 which is to be compressed onto the shaft inserted into the center hole.

1 6. The motor as set forth in claim 3, further comprising:  
2 a sintered bearing for supporting the shaft, in which lubricant oil is  
3 contained; and  
4 a wall member formed on one end face of the boss so as to face the  
5 bearing with a gap having a predetermined width in between for blocking the  
6 lubricant oil splashed from the bearing.

1 7. The motor as set forth in claim 6, wherein the blocking wall member  
2 extends in a direction of which the center hole extends so as to surround an  
3 outer circumferential face of the bearing; and  
4 wherein the gap between the blocking wall member and the outer  
5 circumferential face of the bearing is determined to such an extent that the  
6 splashed lubricant oil attached to the blocking wall and depended therefrom  
7 can adhere again onto the outer circumferential wall of the bearing.

1 8. A motor comprising:  
2 a boss having a center hole;  
3 a shaft press-fitted into the center hole;  
4 a sintered bearing for supporting the shaft, in which lubricant oil is  
5 contained;

6 a holder for holding the bearing; and  
7 a wall member formed on one end face of the boss so as to face the  
8 bearing with a gap having a predetermined width in between for blocking the  
9 lubricant oil splashed from the bearing.

1 9. The motor as set forth in claim 8, wherein one end face of the boss  
2 faces one end face of the bearing; and

3 wherein an annular recess is formed on the end face of the boss such  
4 that outer circumferential wall of the annular recess serves as the blocking wall  
5 member.

1 10. The motor as set forth in claim 9, wherein the outer circumferential  
2 wall of the annular recess is arranged inner than an outer circumferential wall of  
3 the holder.

1 11. The motor as set forth in claim 8, wherein the blocking wall member  
2 extends in a direction of which the center hole extends so as to surround an  
3 outer circumferential face of the bearing; and

4 wherein the gap between the blocking wall member and the outer  
5 circumferential face of the bearing is determined to such an extent that the  
6 splashed lubricant oil attached to the blocking wall and depended therefrom  
7 can adhere again onto the outer circumferential wall of the bearing.

1 12. The motor as set forth in claim 8, wherein oil repellant finishing is  
2 applied onto the inner face of the blocking wall member.